Statement of Work

Date	April 27, 2016
Client	US Embassy Dar es Salaam
Job Name	Renovation of Water Treatment Plants and Pumps.
Sponsored by	OBO 7901.C
From	Diana M. Babu, US Embassy Project Engineer.

Summary

The US Embassy, Dar es Salaam has a requirement to renovate water treatment plants and pumps at the Us Embassy Dar es Salaam. This is mainly due to previous failure of high-level float switch resulting into extensive flooding which in turn caused submerged water pumps to fail. The works shall be done as per scope of work, specifications and General contract conditions. This project requires an experienced contractor execute the job.
The Contractor shall provide all labor, material, tools, equipment, supervision and other related items required to the complete the project as per scope of work, specifications and drawings.
We advise the contractors to visit the site, verify the existing site conditions to develop their proposal.

Project Scope

The work will consists with mainly renovation and thereafter up- grading the whole system of water treatment plants together with the pumps. The contractor shall replace all the system components, materials and accessories including all wires, switches, controllers, pipes, valves, gauges, feed pumps, backwash pumps, motors, chlorine analyzer etc. In order to the existing layout of the system.

The Contractor shall furnish and supply all materials required by this scope of work, subject to exceptions stated in the Specifications/Statement of Work for materials and equipment to be provided by or work to be performed by the Government or by others under separate contracts, or otherwise specifically indicated in the contract drawings or Specifications/Statement of Work as not included in the contract. At the end of the project, the contractor should provide hard copy and soft copy in AUTOCAD format as built drawings.

This SOW covers the following activities and deliverables:

I. AT THE MAIN TANK:

- Install new two 2HP feed pumps (inlet pumps) and one 3HP backwash pump together with float switches.

- Replace the existing Manganese Green sand media filter system and minor repairs/replacement of manometer lead tubes.

- Replace three package booster pumps (pumping water to the main building), two pumps of 20HP and one pump 15HP

- Replace the existing booster pump control panel/box.

- Replace two submersible sewage pumps of 2HP each.

- Replace the existing rotten pump control panel/box for submersible pump(s) with dual pump control for controlling and protection of two 3-phase pumps rated 1.5Kw.

- Replace chemical dosing pump unit and chlorine analyzer/monitor. Re-fill water treatment disinfectant liquid chlorine, Sodium Hypochlorite 10-12% (In liquid form), packing in either 20Kg canister/drum.

- Replace all pipes and valves.

II. AT THE RO PLANT ROOM

- Install new RO system feed pumps components ie
  Suction/Discharge ports
  (DN40 (11/2´´)/DN40 (11/2´´). Capacity 8.0m³/h at 39.9m (3.39 bar)

- **Install new Pump Motor**
  Three phase, 1.5Kw, 2HP, 380-400V/50Hz, 2900rpm, Equipped with a VFD controller complete with pressure transmitters and float switch system for dry running protection.

- Install new (CIP) Components on the RO plant Skid/frame ie chemical circulation pump type Xylem SHS 32-125/11/D, 3-Phase, 1.1Kw or equivalent.

- Install new Control, measuring and monitoring devices/components on the RO plant Skid/Framing system including stainless steel pressure gauges (manometers), water flow meters, solenoid valves, water quality measuring cell(s), ball valves, pressure switches and motorized valves.

- Install new High pressure pump Xylem Lowera vertical multi-stage high pressure surface electrical pump type 10SV18N075T, completely made of high class stainless steel components, supplied with counter flange Kit, bolts, nuts, washers and gasket set. The components should be of the following specifications;

Suction /Discharge ports
DN50 (2´´)/DN50 (2´´). 6.0m³/h capacityat 199.10m (19.91 bar) and 8.0m³/h at 185.50m (18.55 bar). Hmin= 104m (10.4 bar) and Hmax, H(Q=0) = 216.90m (21.9 bar)

Pump Motor Details;
Three phase, 7.5Kw, 10HP, 380-400V/50Hz, 2900rpm.

- Install new RO membrane Oltremare RO membrane type LOW2-8040 (Equivalent to Hydranautics ESPA2-7 8040 flush cut with ATD) (Anti telescoping Device). Energy Serving PolyAmide Composite membranes with the following specification:

  i. Permeate production: 9,000GPD per element = 34.1m³/day/element.
  ii. Nominal salt rejection: 99.6%
  iii. Filtration surface area: 400ft²
  iv. Element test pressure: 150PSI

- Install new chemical tank 250liter complete with lid, suction lance plus two-stage float switch and manual stirrer.

Schedule

At the time, the Performa cost estimate is submitted the contractor shall also submit a preliminary project schedule. The schedule shall clearly outline each of the major tasks to be completed and shall show specific benchmark dates on when each task will be completed.

Within five (5) five days of contract award the contractor shall submit a project schedule. This schedule shall be in the form of a Gantt chart or similar. The schedule shall clearly outline each of the major tasks to be completed and shall show specific benchmark dates on when each task will be completed. When the Government has accepted any time schedule, it shall be binding upon the Contractor. The completion date is fixed and may be extended only by a written contract modification signed by the Contracting Officer. Acceptance or approval of any schedule or revision thereof by the Government shall not
(1) Extend the completion date or obligate the Government to do so,
(2) Constitute acceptance or approval of any delay, nor
(3) Excuse the Contractor from or relieve the Contractor of its obligation to maintain the progress of the work and achieve completion by the established completion date.

Excusable delay

The Contractor will be allowed time, not money, for excusable delays as defined in FAR 52.249-10, Default. Examples of such cases include
(l) acts of God or of the public enemy,
(2) Acts of the United States Government in either its sovereign or contractual capacity,
(3) Acts of the government of the host country in its sovereign capacity,
(4) Acts of another contractor in the performance of a contract with the Government,
(5) Fires,
(6) Floods,
(7) Epidemics,
(8) Quarantine restrictions,
(9) Strikes,
(l0) freight embargoes,
(11) Delays in delivery of Government furnished equipment and
(12) Unusually severe weather. In each instance, the failure to perform must be beyond the control and without the fault or negligence of the Contractor, and the failure to perform furthermore

a. must be one that the Contractor could not have reasonably anticipated and taken adequate measures to protect against,
b. cannot be overcome by reasonable efforts to reschedule the work, and
c. Directly and materially affects the date of completion of the project.

Billing Instruction

When submitting an invoice includes the Government's Purchase Order number on your invoice. If VAT is being charged clearly, identify VAT as a separate line item. Provide clear and precise payment instructions.

Contract award shall be made to the lowest price technically acceptable contractor. The Government may award contracts by individual sections or collectively, whichever format is in the best interests of the Government.

In your Performa, identify the qualifications of personnel you intend to use on this project if awarded a contract. Also include a summary of your firms quality assurance program to ensure that all work and material used is first class in quality and workmanship. Finally, include any qualifications your firm has that you feel make it uniquely qualified to carry out this work.

All submittals shall be in the English language.

Warranty

In accordance with FAR 52.212-4, Contract Terms and Conditions-Commercial Items, the contractor warrants and implies items and services provided. The contractor shall guarantee that all work performed will be free from all defects in workmanship and materials and that all installation will provide the capacities and characteristics specified. The contract further guarantees that if, during a period of one calendar year from the date of the certificate of completion and acceptance of the work, any such defects will be repaired by the contractor at his expenses. .